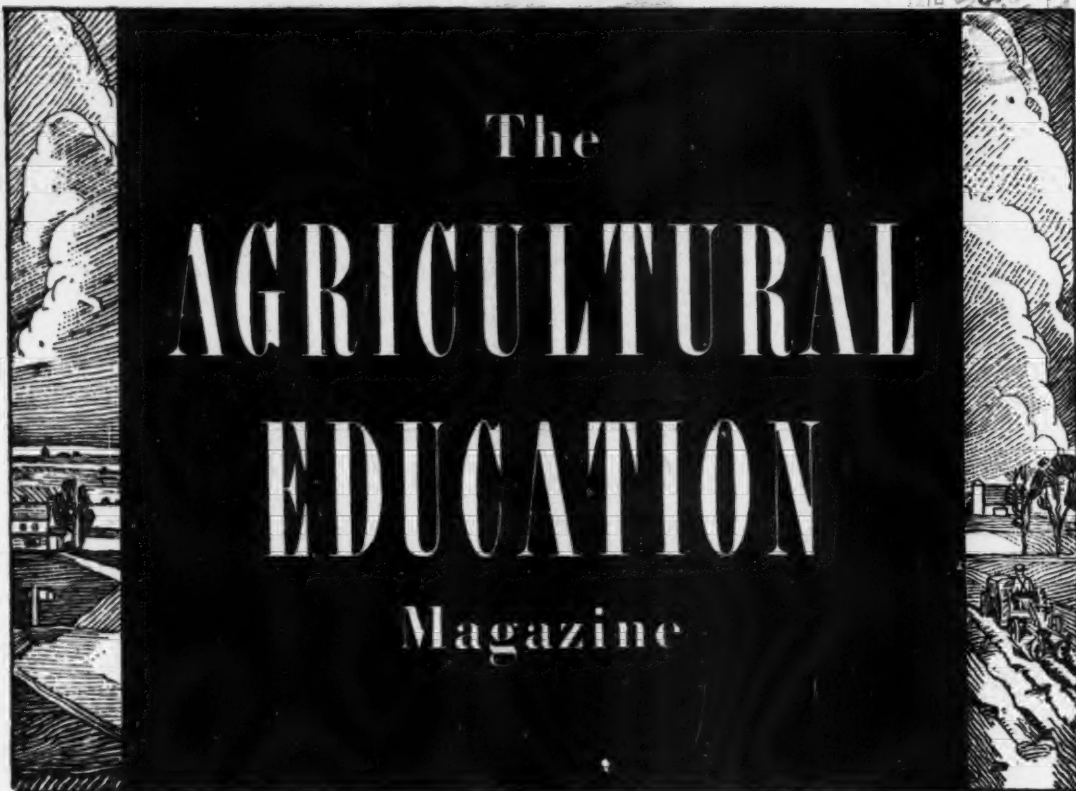


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"THE AGRICULTURAL population," says Cato, "Produces the bravest men, the most valiant soldiers, and a class of citizens the least given of all to evil designs."

—Pliny the Elder



The Agricultural Education Magazine

A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by the Meredith Publishing Company at Des Moines, Iowa.

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Editorial Comment

Introducing the New Editor



O. C. Aderhold

IT IS fortunate for vocational education in agriculture that there is a growing group of young men of talent, vision, and rich experience and training from whom to select the editor of our magazine. The Editing-Managing Board is glad to introduce as one of such a group the new editor, Dr. Omer Clyde Aderhold, Professor of Vocational Education, University of Georgia, Athens, Georgia.

Dr. Aderhold is no stranger to the readers of *The Agricultural Education Magazine*. He has served with Dr. J. B. McClelland as co-editor of the section on farmer classes for the past two years and is a frequent contributor. He is an author of numerous bulletins and teaching helps. His journalistic experience also includes the editorship of the *Georgia Agriculturist* while he was an undergraduate student at the University of Georgia.

The early training and experience of our new editor includes twenty years on a farm in Georgia, and he now owns and operates a farm near Athens, which is his home. Graduating from the university in 1923 Dr. Aderhold was teacher of agriculture and principal, and later a superintendent in Georgia schools. In 1928 he was designated as Master Teacher of Georgia. Since 1929 he has been engaged in teacher-education work at the University of Georgia.

Dr. Aderhold's advanced education includes the M. S. degree earned at the university in 1930 and the Ph. D. degree awarded at the Ohio State University in 1938. He is a member of Alpha Zeta, Kappa Delta Pi, and Phi Delta Kappa.

The leadership activities in which Dr. Aderhold has engaged include service on the National Committee on Objectives for Vocational Education in Agriculture in 1936. The next year he served for a short period with the United States Department of Agriculture in preparation of teaching material for teachers in the southern region. In his own state he pioneered in new types of pre-service and in-service education for teachers of agriculture and other educational workers involving co-operative effort in education, extension work, F.S.A., and other agencies. He is a member and acting director of the Institute for the Study of Georgia Problems.

In a recent letter to the editor Paul Chapman, Dean of the College of Agriculture, University of Georgia, made the following comment regarding the editor-elect: "His ability has been recognized by agricultural leaders thruout the nation. His associates in the University of Georgia and other leaders in the state are constantly calling upon him for help in carrying out the enterprises in which they are engaged. In choosing him, the agricultural education workers have selected one of the best informed men in the field and an editor who will always be grateful for reader reactions and suggestions as to ways in which the magazine may be improved and the program of agricultural education carried on to greater achievements."

In reviewing the past three years that the retiring editor has been privileged to serve he is reminded of the many new friends that have been made, the educative experiences obtained, and the pleasure that he has had in rendering a service that was interesting in itself and which he enjoyed doing. Thanks are due to those who wrote, to the special editors, the members of the editing-managing board, and to the staff of the publishers, all of whom have shown fullest co-operation.

We are certain that Dr. Aderhold will receive your hearty support. Let us remember that the kind of magazine the editor produces depends most of all on the variety and quality of the writing done by teachers, teacher-educators, supervisors, and others. The editor, just as the rest of us, has his regular work to do, and is just as interested in his home and family. Give him a lift on his job.

These are days when some institutions are moving ahead to bigger things, while others may be passing out of the picture. In these trying times it is essential that our magazine continue as the most potent force for professional improvement in the field of agricultural education. Let us all do our share to make possible the continuation and improvement of this service.

Which Farmers?

IN EVALUATING programs of adult education one of the most common statements made by teachers of agriculture is to the effect that the farmers who have been enrolled are those least in need of assistance or training; that the ones who really need the instruction have not come to the meetings. Extension workers and other agricultural educators have reported the same situation with respect to the reception of their educational programs by farmers.

Many teachers have been concerned about this inability to attract low-income farmers to organized classes. Others take the stand that the situation is inevitable. They voice the opinion that the lower-income farmers of the community learn approved practices from their more skilled neighbors. They may say they prefer to work more intensively with a small, or medium-sized group of interested farmers than to try to secure results by a general "broadside" at a heterogeneous group or to organize several groups.

The burden of this editorial is not to suggest the way out of this problem or to recommend techniques for instructing low-income farmers or untrained farmers. Rather, it is to suggest that we take two very necessary, preliminary steps.

The first of these is to face squarely the question of *which* farmers, or *how many* farmers agricultural education is to serve. D. M. Clements, speaking at the Boston A.V.A. convention last December has already given his answer to this question:

"Prior to this emergency most of the evening classes were made up of selected farmers and selected problems; now, a department of vocational agriculture should devise ways and means of getting instruction to *every* farmer. During the past 24 years we have built evening classes up to a total of 10,000, serving in excess of 200,000 farmers. We should conduct 30,000 evening classes and serve about 700,000 farmers if our efforts are to be effective in this program. . . . Teachers of vocational agriculture should establish evening schools to serve *all* the farmers of their communities."

If this is the position we should take during the war is there any reason why we should ever abandon it? If *all* the farmers had been provided with systematic instruction thru the years would some of the needs of low-income farmers have been cared for so that there would have been less need for the services of other agencies, such as, for example, the F.S.A.? We will grant that this agency renders other than educational service. But what might be done for these farmers in organized instruction? What might be done with those farmers at the next higher level?

If the decision is made that in agricultural education we should provide instruction for all the farmers it is equally important to take the second step. That is to make careful, thorough studies of the characteristics, situations, needs, and interests of the farmers not now being served by adult classes in agriculture, and to develop thru experimentation workable techniques for providing effective, systematic instruction for them. If agricultural education is to be of maximum benefit to the people who support it we shall have to do this.

The Income Tax and Farm Records

MOST teachers of agriculture have by now made their income tax return, and we hope have been either thrifty enough or lucky enough to be able to pay their 1941 tax. Having survived this "major operation" they probably have not looked upon the tax as an unmixed blessing. And yet it now appears that the lowering of exemptions which has brought thousands of farmers into the picture for the first time seems to be adding motivation to record keeping. Farm management specialists report an unprecedented demand for farm-account books. Teachers of agriculture report greater success than ever before in starting young farmers and adult farmers in their classes in programs of record keeping and interpretation. In states where parents are not required by law to include the earnings of their children in their returns many all-day students may have to make returns. Records are needed all along the line. Instruction in record keeping can be given all along the line.

A. M. FIELD

Methods

Responsibility of the Teacher of Vocational Agriculture in Developing Farmers' Co-operatives

M. C. GAAR, Teacher Education; Morgantown, West Virginia

IS co-operative effort fully realized by the farmers in this country? Are enough farmers well enough acquainted with its advantages to appreciate its significance toward a revolution in the business of farming? Is our present program of vocational education in agriculture making an adequate effort to bring about the necessary consciousness of producers, especially small farmers and those in isolated areas, for such co-operative effort? What percentage of the farmers in the community is producing commodities beyond home consumption? What is the margin of profit on products that are sold? How can the teacher of vocational agriculture help farmers, especially the small and subsistence farmers, to produce more products and get them to market at a price the consumer can afford to pay, and at a greater margin of profit to the producer?

These are simple, everyday problems facing many of our producers. Co-operative effort among farmers has been a major problem for the United States Department of Agriculture and other agencies for many years, and, in fact, progress has been most gratifying. In the 1937-38 marketing season approximately 2,500,000 farmers identified themselves with 8,300 farmers' co-operatives, and sold approximately \$2,000,000,000 worth of farm produce co-operatively. It is admitted that these farmers received some dividends based on the amount of business done, but the outstanding advantages received were the services rendered them by their co-operatives. These farmers are members of co-operatives because they understand thoroughly the advantages of being members.

Many Farmers Not in Co-operatives

From the foregoing data we find that approximately only 40 percent of the farmers in the United States are doing business co-operatively, and that only about 30 percent of the total farm produce was sold co-operatively. The major portion of this co-operative effort is found in the north-central states, the northeastern states, and those on the Pacific coast, altho most states have some form of co-operative marketing, however limited the amount of business done may be.

There are literally thousands of small farmers in the United States who do not



M. C. Gaar

belong to farmers' co-operatives; many of them living in isolated areas. Apparently they do not know anything about co-operative effort, or are apathetic toward such activities, either because of unfortunate previous unsuccessful experiences, or because of ignorance of their value. Actually, the small, isolated farmer is the person who needs the help most, yet he is the person who is hardest to reach.

Teachers of agriculture may tend to cast aside these problems because of their difficulty, regardless of their significance to our agricultural economy. Many of our teachers in West Virginia have told me that it would be easy to get their students to set up progressive, supervised farming programs if the students had some way of marketing their produce. What reasonable person would expect a boy to outline and put into operation such a program unless he had some idea of disposing of products at a reasonable profit? One teacher said, "I have gone as far as I can until some kind of marketing organization is developed." I have heard similar statements from teachers in other states. A letter from a small farmer in Louisiana recently stated, "The government wants more eggs and more milk produced. I now have a surplus of both products but am unable to dispose of them because there is no outlet. I could maintain this surplus thruout the year, but what is the use? This county is filled with such farms." I might add, there is a department of vocational agriculture in each of the high schools of that county.

The situation just described is true of hundreds of rural counties thruout the United States. Food demands can be met adequately, and at some time can give the small farmer an opportunity to build up his income if co-operative marketing facilities are developed in the small and isolated areas. Obviously, the task will be a difficult one, yet not beyond solution. Certainly, such effort may necessarily be started on a small scale. Quality of products may be low at first, and prices may not be the best until volume and quality is reached. It will take time, and its success in any area will depend on a supporting educational program.

Educational Services Needed

There is an unlimited potential production resource in the small, and in some cases, isolated farmers in the United States. The mere tapping of such resources will produce abundance of food stocks, materially increase the national farm income, and change a very large percentage of our farmers from national liabilities to valuable national assets.

What are some co-operative educational services that the teacher of vocational agriculture might sponsor that are vital to national defense, and at the same time offer material assistance to farmers in the community? In order for education in co-operative effort to be effective in the school and community there must be direct contact with co-operative activities. One cannot expect much interest or results by merely teaching about co-operatives. If there are local, active farmers' co-operatives in the community they will afford direct contact and practical study. On the other hand, as is the case in most rural communities, if there are no such organizations, and where there is an apparent need for such, it appears logical that the vocational agriculture teacher might initiate such activities by making a start toward creating interest in the organization of one or more of the following: cream station, egg-grading station, or co-operative poultry shipping station, purchasing association, farm-repair shop, soil conservation district, game reserve, meat-curing plant, grazing association, rural-electrification service, or recreation center.

Certainly there are many approaches to instruction in this area. Many of them are perhaps superior to the one to be suggested here. However, this is one way to get started. The significant factor is to get started. There has never been a time that has and is offering better opportunities for such a functional educational program for the small farmer than the present.

First Steps in Establishment of a Co-operative in a Dairy Community

1. With the aid of the class prepare a survey form for securing necessary information about the dairy resources in the community.

2. Have members in the class and F.F.A. chapter members secure enough surveys in their local areas to complete a reasonable coverage of the community. This should be done as quickly as possible.

3. Have class summarize the surveys and present data to school officials, board of education, and local advisory committee for approval for further action.

Let us assume that the following situation prevails in the community as revealed by the survey summary. General farming is typical in the community, with almost all farmers keeping two to five grade milk cows to produce milk for home use. The topography is hilly to rolling with hill land predominating. There is more land that is better suited for pasture and timber than for crop land. There is an opportunity to increase pasture facilities. Much of the cultivated land is eroding because of steep slopes, clean cultivation, and lack of cover crops.

Fifty percent of the farmers are within five miles of the school, 25 percent are between five and ten miles, and 25 percent are more than ten miles. Seventy percent of the students are transferred to and from school by busses.

(Continued on page 178)

Varied and Practical Program Carried on In Maui, Hawaii

FRANCIS C. AKO, Instructor, Lahainaluna Technical High School, Lahaina, Maui, T. H.

ONE of the largest, and probably the most practical programs of vocational agriculture in the Territory of Hawaii! That is the unopposed claim of the department at the Lahainaluna Technical High School.

The F.F.A. chapter is unique in that the majority of the members reside in the school as boarders in the dormitory. Only a small minority of the more than 50 members are not boarders as they live close by. Hawaiians, Orientals, Caucasians, and hybrid races all form an amiable potpourri of American youth.

As part of the program, the boys rise bright and early every morning to perform the various farm chores necessary to maintain and improve the largest school farm in Hawaii. A dairy, a pigery, a poultry plant, vegetable gardens, fruit orchards, forage plots, an apiary, nursery, and school grounds' beautification are all cared for by the boys. Maintaining direct supervision over the boys are two instructors of agriculture and a farm foreman.

Practical Farm Work Provided at School

In addition to regular classes, an average of three hours of practical work per day is required of each boy. Rotation of practices has been stressed, especially during the past year. After becoming proficient in one skill, continued application of a boy's energy may be more economical management, but learning has all but ceased. Rotation takes place, therefore, not only within, but also among enterprises here at Lahainaluna.



Hawaiian Future Farmer, Simon Kimseu smiles as he points to the eggs in the laying battery

The dairy herd consists of 23 cows in the milking herd, of which only two are purebred Holsteins. The balance are all high-grade Holsteins. One purebred bull is used to serve the entire herd, a new purchase being planned in the near future to prevent too close inbreeding. Heifers and calves, of which four are purebreds, bring the herd total up to 40. Feeding, milking, bottling, and butter-making are learned by the boys and supplemented with classroom instruction. The chief cut forage used is Mexican and Merker grass, while koa haole

(*Leucena glauca*) constitutes the bulk of the grazed pasture.

Squealing, 200-pound porkers are produced in six months by the boys on a feeding system utilizing as much as possible of the surplus and cull crops grown in the school. Prominent among these are cabbage, carrots, sweet potatoes, papaias, avocados, and mangoes. Dining hall slop is also used—right down to the last spoonful! Skim milk from the dairy, fed twice a day, causes near panics—the pigs like it so much. Balanced grain rations, hand-mixed by the boys, also play an important part in the feeding program of the herd of 70 animals. The main source of protein is tuna fishmeal, produced locally in the Territory, and soybean-oil meal, imported from continental United States. Green-cut alfalfa forms the bulk of the roughage. Only local residents realize the difficulties of raising alfalfa in the Hawaiian environment and it is no mean feat for these

gradually replaced by disease-resistant Merker during the past year and yields have been unsurpassed. The boys' success is largely due to the capable supervision of the farm foreman, Mr. Alfred

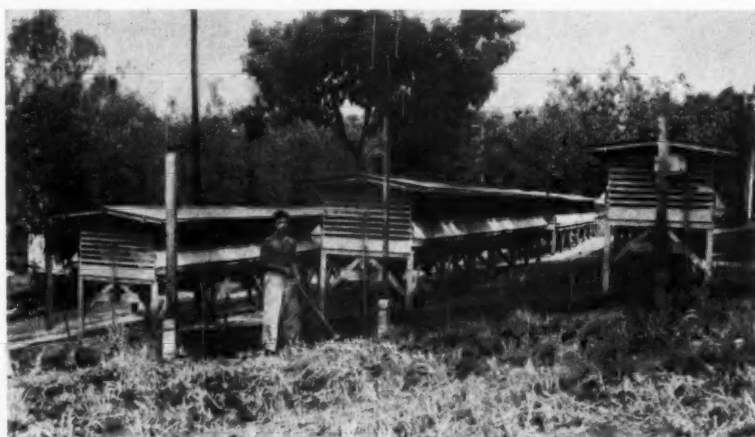


Foreground—dairy feeding corral. Background—feed barn. Calf and maternity pens located in basement

Lum, who sets high goals of achievement for them.

Attention Given to Fruits

Fruits peculiar to the tropics and subtropics are raised. Mango trees literally sprinkle the campus. Avocado trees pro-



View of farm, showing freshly cut grass plot in foreground and individual laying batteries in background

Future Farmers of America to accomplish this! The boys butcher, dress, and market the hogs themselves.

Experience Provided in Poultry Production

About 2,000 birds make up the school's poultry flock. Raising poultry under every common local condition is demonstrated—on ground, on wooden floors, on wire floors, and in individual laying batteries. The boys feed, collect eggs, process, and grade them for marketing; kill and dress, incubate, and keep records, all as a matter of learning by doing. Commercially mixed feeds are used since they have proven more economical and convenient, according to Mr. Asakuma Goto, instructor in charge of the poultry unit.

About 10 acres of forage are grown by the boys as cut feed, mainly for the cows, with a small portion for the pigs and chickens. Mexican, Merker, Napier, Sudan, California or Panicum, Guinea, alfalfa, and several other minor grasses are cultivated. The Napier beds have been

vide shade for the poultry yard while yielding their valuable fruit. Banana and papaya orchards occupy about five acres on the school farm, and the dining hall table is rarely without these fruits.

Golden ears of corn, red, luscious tomatoes, solid heads of cabbage, brilliant orange carrots, leafy greens, blood-red beets, and red-yellow sweet potatoes form a riot of color, both in the gardens and on the dining table.

The boys learn practical, labor saving methods of irrigating, fertilizing, cultivating, planting, transplanting, thinning, and preparing land. That part of the produce which cannot be used is sold in the town of Lahaina near the school.

All this the boys accomplish as part of their daily routine. Small wonder, then, that the school's agricultural program has a territory-wide reputation! Boys from all islands make up the classes in agriculture and the F.F.A. Chapter. These boys are interested in farming and it is the job of the department to foster, encourage, and teach farming as it can be done—practically, and at a profit.

Supervised Practice

C. L. ANGERER

Supervised Practice, and Development of a Star American Farmer

GLENN HEADY, Instructor, Randolph, Nebraska

DUANE MUNTER* first began his supervised farming program by buying two purebred Duroc Jersey bred gilts in a co-operative-purchase plan, along with his classmates, from one of the foremost breeders in the community. Thirteen head of bred gilts were selected.

Members of the class who selected pedigreed stock for a foundation herd of hogs ordered junior memberships in breed associations representing the breed of hogs they had. Along with his junior membership, each boy received a copy of the breed magazine published by the respective associations, and most of the boys subscribed to the magazines thereafter. Of this group, Duane was an ardent follower of the Duroc Jersey breeders' publication.

Because a record in production from sows was stressed by some of the breeds, boys took great interest in the merits of this phase of hog raising. All litters of eight or more pigs were weighed at weaning, and again at 56 days of age. Other requirements included proper markings, no swirls, etc.

Efficiency Factors Emphasized

Factors such as getting and saving the greatest number of pigs per litter and getting a maximum number of pigs from each sow were combined with others to make for efficiency in swine production. From the start, Duane used all methods of precaution in saving small pigs by putting the sow on a mild laxative ration a few days before farrowing, thoroly cleaning the pens, putting up substantial guard rails, etc. I never knew Duane to have a sow or gilt farrowing without being present to see that she was doing well and receiving the proper care.

Clean lots and pens were observations which I noted on all visitations, and at all times Duane provided a ration with alfalfa or brome grass as a pasture. During breeding time his herd of sows and gilts were always properly flushed, and the boar was well conditioned before being put to use.

It is my belief that it definitely was Duane's efficiency and use of the best of management practices that put four of his Duroc Jersey sows in the merit-of-production list of the ten best in the United States—one of them surpassing all breeds in her production.

Economy in production was realized by raising much of his own feed and in the purchase of feed at times when it was at the lowest price.

Co-operative purchase, and mixing of feeds to receive benefits from bulk purchasing, was taken advantage of by the class. Duane, as chairman or a member of all committees, was always one of the

first to take advantage of the co-operative purchases.

Believing that the initial purchase of the best stock for foundation herds was essential, Duane always selected on type and conformation very carefully—and in all cases, started with purebred animals. However, at no time did he "pay too much for his whistle."

He started his farming program on money borrowed from a local bank, paying \$27.50 for each of his first two gilts and \$35 for a baby beef.

In crop production, Duane selected seed from certified producers only, whether growing for feeding or selling.

Duane's beef breeding cattle project was the only one he carried in which he was not able to buy on a co-operative basis, due to the fact that the class did not organize on this enterprise.

In regard to the co-operative purchase plan, it can be noted that Duane had the ability to expand his project work and to enter into a more pronounced and versatile production program. Thus, whenever his class organized on a new venture it meant that Duane was to launch his talents into a different enterprise than he had previously undertaken.

During the time co-operative purchasing was being used, never were there more than 75 percent of Duane's classmates taking active part. Not only was Duane a 100-percent participant in the co-operative purchase plan, but also he was the only 100-percent member.

*Duane Munter was presented with the award of Star American Farmer at the 1941 convention of the Future Farmers of America at Kansas City.

Four-Year History of Farming Program

1937-'38	1938-'39	1939-'40	1940-'41 (out of school)
(Attended school not offering Vo. Ag. in 1936-'37)	5 Sow & Litter (Spring)	18 Sow & Litter (Spring)	23 Sow & Litter (Spring)
2 Sows & Litter	7 Sow & Litter (Fall)	10 Sow & Litter (Fall)	2 Sow & Litter (Fall)
1 Baby Beef	1 Baby Beef	2 Baby Beef	1 Baby Beef
	1 Breeding Beef Heifer	4 Breeding Beef Heifers	12 Breeding Beef Heifers
8 A. Corn	200 Baby Chicks	200 Baby Chicks	200 Baby Chicks
Labor income \$470	16 A. Corn	310 Laying Hens	300 Laying Hens
	24 A. Barley	2 Breeding Sheep	8 Breeding Sheep
	Labor income \$1,496	1 Feeding Lamb	42 A. Corn
		24 A. Corn	30 A. Barley
		30 A. Barley	8 A. Atlas Scrgo
		3 A. Altas Sorgo	12 A. Oats
		3 A. Soybeans	1 A. Potatoes
		½ A. Potatoes	Labor Income \$3,040
		Labor Income \$3,565	



Duane Munter, Star American Farmer

Using Credit in Getting Started and Expanding a Farming Program

PAUL HILBURN, Teacher, New Braunfels, Texas

ONE of the first problems that confronts a boy when he begins putting into operation his long-term, supervised farming program is how and where to get money to start and carry on his program. This is not only a problem of all-day boys but of part-time boys as well. I have found that if boys have adequate financing, it is no trouble for a large percent of them to advance to higher degrees and become established in farming for themselves. Three definite objectives should be recognized in providing credit for the boy to carry out his productive enterprise projects. First, to provide him with necessary funds for his projects; second, to give him correct training in the proper use of credit; and third, to assist him in getting established in the farming business when his school life is completed.

Wise Use of Credit Essential to Good Program

To the average boy credit is as necessary to his project program as air is to a football, but not so easily provided. Without credit he can only "look on" while his more fortunate classmates get real experience provided by his school. Every worthwhile boy who is interested in becoming established in farming for himself should have the opportunity to carry productive projects. Credit provides this opportunity.

American people are heavy users of credit, and the American farmers are no exception to this rule. Since our actual future farmers will come from the ranks of these boys it is as important for them to learn something about proper use of credit as it is to know how to feed a calf or take care of a litter of pigs.

I have never left it to the F.F.A. boy and his father alone to work out the boy's financing plan, but have felt that it is just as important that I assist in finding credit as it is to help him buy, or supervise the project. Too many teachers expect the boy's fathers to finance project programs, but my experience has been that many fathers have not been in a position to do this. In fact, many of them do not have adequate financing for their own farming operations. I have assisted many farmers in financing their own farm and ranch operations and feel that is part of my job, also.

Regular Sources of Credit Best

I prefer to encourage boys to borrow money for their projects from banks, P.C.A. or other lending agencies, rather than to borrow it from their families. The first reason is that the boy has more interest as he knows that it is his. Secondly, he can do as he sees fit since the money belongs to him. Then, too, he gets business experience and training. I have seen too many boys feed pigs that became Dad's meat hogs, gilts that became Dad's brood sow, and heifers that became Dad's cow.

Here is the way our local chapter handles the financing of its members' projects. Each year the finance committee contacts all the leading agencies

in our community and "shops" for the credit for the chapter members. The committee reports back at a chapter meeting, and the boys select the firm to finance them for the year. After the boys have decided on the organization to finance their projects, each boy makes application for a loan as he needs the money, to the chapter finance committee. The application is in writing, and shows the purpose for which the member wants the money, what facilities he has to carry on the project, and how he plans to repay the loan. The committee goes over the application with the member, and either approves or rejects the loan.

If the loan is approved, the member takes the application to the lending agency and gets his money. If the loan is rejected by the chapter committee, the boy must rework his application in order for the loan to meet the committee's approval. Of course I have to approve or reject the application after the committee has passed on it.

Use of Credit Must Be on Strictly Business Basis

I always try to make it clear to the boys that an extension of credit should never be considered as an accommodation or favor. It should always be strictly a business transaction between the lender and borrower. Since the money borrowed is to be paid back, it is extremely important that the project be well planned and carried out and that it be profitable. The plan of operation and repayment of the loan should be fully understood and agreed upon by both lender and borrower at the time the loan is made.

Much financial difficulty has been caused by loose and haphazard methods in the extension and use of credit. Thru proper training our students of agriculture should avoid such difficulties.

In getting started and established in the farming business when school days are over credit can also furnish what it takes. However, what credit can do for the young man then depends upon what he has done with credit up to that time. Has he handled his projects profitably? Has he used credit carefully and regarded his obligations seriously? Has he reinvested his profits in his business and built up for himself a basis for credit, or has he just spent the money?

Developing Independence in Using Credit

The big problem is to have our boys in such a financial condition that when they begin farming for themselves, they can be financed thru other, regular sources rather than the F.F.A. chapter.

A survey of about 400 loans made by the Austin Production Credit Association to F.F.A. and 4-H Club boys of central Texas shows that, almost without exception, these boys have regarded their debts seriously. Some have requested larger loans than their set-up and experience would justify. Some have made excellent progress in the reinvestment of their profits in larger projects, and have attained degrees of Lone Star and Ameri-

can Farmers. Others have apparently spent their profits. As a whole their records are good.

A source of credit should be selected that has a representative who is well informed on the project program; one who is co-operative in its attitude towards it; and one who can be depended upon to assist the boy with his immediate project, and can continue to assist him on a sound basis when he "gets on his own."

Supervised Farm Practice for Adult Farmers

HENRY P. LAWRENCE, Instructor, Shoals, Indiana

WHEN our department of vocational agriculture was organized in 1938, plans were worked out for conducting an adult-class program. In these plans the following steps were set up:

1. Have a well organized advisory committee and depend on its members for all possible help.
2. Visit all prospective members and get as well acquainted as possible.
 - a. Study and learn the problems and interests of each individual.
 - b. Learn to know these individuals personally and be able to meet them as one farmer would meet another.
3. Carefully plan and organize courses thru the aid of the advisory committee and any individuals who may be able to offer assistance.
4. Make a careful, detailed study of each farmer's production and management program.
5. Make individual visits and talk with the member concerning his personal farm problems.
6. Organize groups of individuals according to the types of projects best fitting their needs, and help each individual to work out a program of project work.
7. Check often to see that each member is carrying out his project plan in a manner that should net the greatest possible returns.
 - a. Send cards to be filled out with the correct records and returned in an effort to stimulate more interest in accurate records.
 - b. Contact the individual in town on Saturday and ask about the project.
 - c. Make visits often, short, and businesslike.
8. Hold one meeting per year to review accomplishments and to recognize those who have made progress in the work.

Stimulating Interest in Supervised Farm Practice Work

Class work with adult farmers during the first year included problems and discussions concerning a "better livestock program." Classes were small but the results in individual supervised practice work were very encouraging.

Three purebred bulls were purchased by the members in an effort to improve breeding cattle, and another member managed to breed his cows to a registered bull belonging to a neighbor. All members were using good, purebred bulls, and all except two were depending only on purebred boars by the end of the

(Continued on page 175)

J. B. McCLELLAND

Farmer Classes

O. C. ADERHOLD

Factors Influencing the Operation of the OSY Program*

R. W. GREGORY, Assistant Director,
Vocational Training for Defense Workers, Washington, D. C.

IN MY discussion I do not want to take up too much time with a review of the historical facts of the OSY (4) program. On the other hand, in order to have a clear understanding of what is being done at the present time, and what may be planned for the future, it is well to make certain we understand one or two things with regard to what has already happened.



R. W. Gregory

As far as I know, the first word said or move made with respect to the establishment of what has now come to be the OSY (4) program was an inquiry addressed to me one morning in the summer of 1940 by Mr. Hawkins as he taxed me down to work. The question he asked was, "What would you do if you had about five million dollars to spend on a farm-shop program with the departments of vocational agriculture?" That led to quite a discussion of the problem then facing us with respect to the organization and financing of a program of education for a large proportion of our out-of-school rural youth. As you know, one thing leads to another, and finally Congress appropriated 10 million dollars for the development of the OSY (4) program.

In attempting to organize my remarks for this meeting so that they may be as specific and as much to the point as possible, I sought for some scheme which I might follow that would make this possible. Being alphabetically conscious, as most Washingtonians are, I have organized this statement under the following five "P's."

The First "P" Is for Purpose

I think we might take a minute to see what has happened to our thinking with respect to the underlying purposes for which the OSY training program was developed.

In the first place, defense training started as a program primarily for experienced workers:

- A. For men unemployed, but who had had previous experience as workers and now needed refresher training.
- B. For men employed and at work who needed supplementary, or upgrading training.

In the early stages, this defense training program quite generally missed the unemployed youth of the country. Quite specifically, the unemployed youth of the rural areas, particularly the farm youth, were missed because of their distance

from the urban industrial centers where the defense-training programs were located.

Considerable sentiment developed with respect to the need for qualifying rural youth for entrance into mechanical occupations. The argument was advanced that this should be done in order that rural youth might not be put to a disadvantage, first, by classification in the selective service, second, by army assignment after their induction, and third, by the lack of an entree to defense jobs such as one gets thru work experience or job training.

This sentiment was further accentuated by the fact that there were large numbers of surplus rural and farm youth, particularly, that needed to be developed into a vast reservoir of potential workers for national defense.

It was largely on the basis of these concepts that the movement for OSY funds was initiated and consummated. Since the original appropriation and the beginning of the OSY defense-training program, two or three other things have transpired to influence the shaping of the purpose back of this program.

As was to be expected, some of the surplus rural population soon began to disappear due to induction into army service and to their migration to industrial centers where they sought and secured some kind of employment. This was particularly true in the more industrialized areas where, for the most part, surplus youth population was never particularly acute.

When the OSY (4) program started there was hardly anyone in this country but who thought that we had all of the food we would ever need in any emergency that might arise. We had been told so long about the amount of pork, lard, corn, cotton, and other farm products that had been piling up in this country in such large quantities, that it was hard to believe that the time ever would come when a campaign would be organized for their increased production. That time has arrived, however, and we are in the beginnings of a "Food-for-Freedom" program which, those who are responsible for it say, we will have to make work if we are to do our part for "Freedom's sake."

Concurrent with the development of this sentiment began the development of farm-labor shortages in a few highly intensified farming areas. Considerable discussion took place with respect to the availability of the OSY (4) program as an instrumentality for training individuals as a means of solving these two problems.

These things were all reflected in the statement of objectives which was written into Misc. 2600 when it was

revised last July. This statement acknowledged a broadening of the purpose for OSY training by pointing out that youth trained thru the OSY program "may go into national defense industrial employment as the occasion demands, or may be better qualified to serve agriculture as it becomes increasingly mechanized. These courses may also function as devices for the selection and guidance of individuals into advanced, or specific training courses."

At the present time we are faced with an increasing emphasis upon the place of agriculture in defense, which quite naturally has implications for the OSY (4) program which, up to the moment, has been operating primarily in rural areas. First, we have been urged to change the age limits so that older "youth" may be admitted to the OSY classes; second, we have been urged to emphasize the repair of farm machinery in both our metal-working courses and our auto, truck and tractor courses; third, the question has been raised repeatedly as to whether or not it would be possible to make some modification in the content of the OSY courses, or fourth, even go so far as to secure the approval of other courses which would be of direct aid to the "Food for Freedom" program now under way.

As you can see, there has been a shifting in the understanding and defining of the purposes underlying the OSY program.

The Second "P" Is in the Program

The OSY program as set up is designed as a general, preemployment, training instrument from which the student gets a basic, general foundation in shop training made up of about three ingredients. First, he gets to know tools and equipment, how to handle and care for them, and to develop a respect for their quality and worth; second, he acquires some understanding of the materials used in industrial and construction jobs, how these various materials react to the tools he is going to use, to temperature, to pressure and many other forces and factors brought to bear upon them in the industrial processes. Third, he is introduced to the elementary shop procedures and practices that he will be expected to adopt and use if he gains entrance into industrial occupations, particularly in the initial stages of his experience as an industrial worker.

It has not been presumed that the OSY program would prepare selected youth for specific occupations, but rather that it would offer to all youth enrolling a maximum opportunity for the attainment of basic and fundamental skills and understandings needed by all employees in industrial occupations.

Instead of organizing the instruction to be specific in character, it has been thought desirable to plan it so that the youth enrolled might receive the general training in one course to be followed by other general training in one or more of the remaining approved courses. It has been thought that greater service would be rendered the youth concerned and the

Courses Conducted the Way Farmers Want Them

C. A. CAZALY, Director of Agriculture, Delano Joint Union High School, Delano, California

AT DELANO Joint Union High School adult classes are conducted in various phases of agriculture for the benefit of the community farmers. Classes in poultry and egg production, soil testing, propagation of plants, and landscaping have been held under the auspices of the agriculture department. The method of organization and the demonstrations carried out are somewhat unique.

The members of the adult class organize into a club and elect officers, such as President, Secretary and Treasurer, (the Secretary and the Treasurer are generally combined.) The instructor and the members of the class discuss an outline of study to be followed. This outline includes the type of information most needed, speakers who can best handle specific topics of technical information, field trips on which the observance of outstanding practice would benefit everyone, and any other important work of the class.

Promotional Methods

A poultry class recently held in this school is a good example of the organization and value of such work.

Classes were advertised by putting a notice in the school paper and in both town papers, then cards were sent to all the poultrymen in the community. Information given out included the date the class would start, the nights of the week it would be held, the time of starting and closing; also some suggested topics for discussion.

The opening night there were only 15 persons present. From this group, officers were elected, and a program outlined. Each night new people dropped in until the enrollment had reached 30. The

course as outlined included more of the familiar and important phases of the poultry industry such as feeding, housing, care and management, diseases and insects, purchasing, brooding, marketing, and general poultry husbandry.

In studying diseases, sick and dead birds were brought to class where autopsies were made. In some cases the sick birds were treated. A general knowledge of diseases, their prevention and control was given. A good veterinarian was invited in. He gave in great detail the cause, effect, prevention, and possible cure of diseases.

In culling poultry, the class was taken by school bus to a poultry farm where members culled all the birds in the flock. The instructor gave the final judging which centered the responsibility.

In discussing feeds and feeding, several managers of feed stores were invited in at different times to discuss the relative value of their feeds, and their costs. Thus, the farmers were able to compare feeds and learn their values.

In studying the selection of chickens, several breeders of standard poultry were invited in to discuss the merits of their birds; so a good comparison was possible.

Field Trip Contributes Educational Values

After this class had made steady progress for three weeks, a field trip was taken in one of the school buses. The trip was taken on Sunday, which was the only available day when everyone could get away. The trip included an inspection of five commercial poultry farms, a picnic dinner in one of the parks, and a regular singing party was held, both going and returning. At the close of the course a covered-dish supper was held in the agri-

culture room. There were 52 persons present at this supper. One of the farmers returned thanks, the women served food, and several farmers served coffee made by the instructor. After the supper, several musical numbers were given by members of the class, several talks by members, and a motion picture was shown by the instructor.

This type of class proved popular with the rural community, because it served educationally and socially. It also brought a better understanding between feed men, merchants, and the farmers, especially as to relative merits of their merchandise and the farmers' needs.

Results in the Community

The carry-over value in the agriculture of the community was noteworthy. Four poultrymen increased their flocks, five farmers started poultry as a side line, and the community became conscious of better poultry conditions.

Other classes in agriculture were organized in the same manner in Delano Joint Union High School. Such classes are generally requested by the farmers. All of them enjoy the chance to participate, and feel it is their club activity.

In addition to the adult class in Agriculture, an adult class in wood-working is taught by the farm-mechanics instructor. In this course not only the farmers, but also the townspeople construct their own furniture and household equipment, making things for the yard, flowers, and "gadgets" for the house.

Young-Farmer Classes

Another phase of the out-of-school work being conducted in Delano Joint Union High School, is the group known as the Del-Mac Young Farmers. The name Del-Mac recognizes the two neighboring communities which make up the personnel, "Del" standing for Delano, and "Mac" standing for McFarland, six miles away. These out-of-school farm boys have monthly meetings where educational and social programs are conducted under their own leadership, sometimes combining with neighboring Young Farmers.

In addition to the above-mentioned phases of educational work, this school has started a Junior Farmers' group in the elementary schools for the 5th, 6th, 7th, and 8th-grade boys. They are enrolled in a Junior F.F.A. chapter. They carry projects, keep records on them, and exhibit their projects at the regular F.F.A. fair where prizes are awarded. The purposes of this program are to help determine the occupational outlook of the farm boy and to start him thinking about better farm life and activities.

Co-operation of School Staff

The Delano Joint Union High School has a vocationally-minded principal and board who encourage such activities. Its department of agriculture is well-known and well-established in the community. It is called on almost daily to serve in some agricultural way.

The work is made possible by the co-operative work of the three instructors who consider the most important thing in vocational agriculture to be service to their community in the best interests of agriculture.

interests of national defense if the youth having the time available for more than that necessary for one course should enroll in an additional course rather than concentrate all of his time on any one type.

As you know, the OSY program is at present made up of four general shop courses. Last year approximately eight percent of the OSY instruction was classified as 4-B or specific preparatory training. This type of training has been eliminated from the present program, and in those instances where such instruction was in operation, efforts have been made by the local schools and the states to either reorganize the instruction in those centers to conform to the rules and regulations set forth in Misc. 2600 (Rev. July 1941) or to outline a course that could be approved under the VE-ND (1) defense training program.

The Third "P" Makes Progress

We are glad to say there is some progress to report. The act appropriating OSY funds became law October 9, 1940, but it was almost March before OSY classes in great numbers got under way. During March, April, May, and June, there were approximately 85 thousand

enrollments in OSY courses each month, and the records will show that slightly more than 275 thousand enrollments were provided for in the OSY program under Public Law 812 funds. There were 12,941 courses organized and conducted in approximately 75 hundred communities of the United States last year. The records show that 79.5 percent of the enrollments were of rural youth, that 13.6 percent were negroes, 17 percent were CCC enrollees, and that 88.5 percent of the courses were conducted under the local supervision of teachers of vocational agriculture.

A study of the costs of this first year's program reveals that it costs on the average 17 cents per trainee-hour for instruction, or \$23.39 for instruction of each trainee for each course. On the average, each course operated 8.6 weeks and equipment costs averaged \$9.70 per trainee. Between July 1, 1941, and December 1, 1941, under the funds provided by Public Law 146, 6,507 courses in 2,779 communities have been organized. The courses have averaged from 15 to 18 young men enrolled and are scheduled to operate, in the main, for 10 weeks' time. Most of the instruction being conducted under Public Law 146 has started

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Farm Mechanics

L. B. POLLOM

Learning to Build by Building

WALTER SCHROEDER, Teacher, Clinton, Michigan

IN AUGUST 20, 1940, the Clinton board of education approved plans for the construction of a general and farm-shop building. The board took this step after discussion showed that adequate facilities were not available in the school plant for a farm-shop program. Funds were allocated with the understanding that the superintendent and I would supervise the construction. The ninth-grade, general-shop class and the farm-shop class were to perform the actual construction under my direction. A splendid opportunity thus presented itself for the students to learn to do by doing.

Ground was cleared for the 30- by 68-foot building on September 5, 1940. On the sixth, the building was staked out and digging for the foundation started. Four school days later the boys started building forms for the walls. This was rather difficult and particular work but the job was finished two weeks later. The boys mixed 38 yards of aggregate and filler with 120 sacks of cement, and poured the concrete in three days, working only during class time. While the foundation was setting, the students dug the trench and placed 95 feet of 4-inch sewer tile and laid 100 feet of water pipe.

The only hired labor was used for a period of one week in laying blocks and helping place two steel girders for roof support. During that time students mixed mortar, built scaffolds, handed up blocks, placed 18 steel sashes, bolted on lintels, and set two door jambs.

On October 24, 23 of the 92 two-by-

10-inch joists were put in place. The joists were supported and concreted into the block walls at each end of the building. In this step the boys brought each joist to its proper height and established the correct distance between each piece before it was cemented in. Two steel girders and a partition support the joists in the building. The students nailed on 2,040 square feet of sheathing in two-and-one-half school days. The two-ply,

built-up roof was put on in eight hours.

While some of the students were placing joists others built forms, poured, and finished 18 concrete window sills. From the masonry learned in block laying, the boys were able to put on the coping tile and flashing.

Seldom was it necessary to assign a particular job to a boy because the boys, being interested in the project, voluntarily chose their work for each period.

I believed some young engineers were in the making when the concrete floor was poured. This job made it necessary to learn the use of the level in securing the proper grade of floor, and placing the screeds. Each boy also learned the



Placing Joists



Pouring Concrete for Foundation

fundamentals of cement finishing on the 2,040 square feet of concrete floor.

The equipment was moved from the school to the new shop on December 16. The students then built partitions, hung doors, and installed the electrical wiring, plugs, fixtures, the service, and assisted in erecting the power line to the shop.

Space was marked off around the wall for each of the following units: carpentry, sheet-metal work, machinery repairs, farm motors, home conveniences, painting, glazing, rural electrification, concrete work, rope work, harness repair, and belt work. Benches and tool boxes were built to accommodate the work and tools necessary for the jobs of the unit. Because costs had to be kept at a minimum, the students also built the forge, using discarded materials consisting of two 50-gallon oil drums, some pipe, a brake drum, and a vacuum-cleaner motor.

This building project provided ample opportunities for each boy to do jobs in which he was interested and which he was able to perform. It enabled the students to learn many steps in construction work that will help them in their work at home, on the farm, or in many other occupations which they might enter.

A New Farm-Mechanics Program

A. D. LONGHOUSE, Instructor in Farm Mechanics,
West Virginia University

WITH increasing demand for skilled and semi-skilled labor, increased mechanization of agriculture, the tightening labor market, and a scarcity of farm labor, vocational agriculture must place greater emphasis upon its mechanics-training program. With the prospects of difficult times ahead after the close of the present war, farmers will need to depend upon their mechanical training and ability to keep used machinery in condition.

There will be a time after this war, as after the first World War, during which farmers will have to curb their expenditures. They will have to take better care of the farm equipment, practice greater conservation of their land resources, and maintain existing farm buildings. Vocational agriculture must assume a great proportion of this responsibility. It must help the farmers, both young and old, to take care of what they now have in the way of farm machinery, buildings, soil, wood lot, pasture, and fences.

A new, and broader course in farm mechanics in the department of vocational agriculture must be developed: a course that will more nearly meet the everyday needs of the mechanized farm than it has in the past. Too many of our present day farm shops still make bread boards, bench stops, tie racks, and the like; and fail to train boys in the skills most essential on the farm. They fail to grasp the practical value shop training can mean to farm youth and adults.

Present Shops Inadequate

Farm-shop buildings and rooms in the majority of schools are not adequate. Either they lack sufficient floor space or they are constructed without a chimney for forge facilities. Many lack double doors thru which farm machinery and power equipment may be taken. More recently some centralized schools have provided farm-shop rooms with beautiful tiled or hardwood floors and plastered walls. Then the school administration has refused to allow dirty and greasy machinery on the floors for fear the rooms would get dirty!

Our present emergency program for training rural youth for national defense has revealed numerous weaknesses in our regular program of farm-shop training; and for that matter our whole educational program.

Speaking principally for vocational agriculture, the writer would like to offer, in the next few paragraphs, a plan for a greater shop program in our departments of vocational agriculture which will meet the needs of the farm people as well as the rural youth. In rural areas the shop program in vocational agriculture should train farm and village boys to enable them to receive training which will allow



A. D. Longhouse

them an equal opportunity with urban youth to secure jobs in industry.

There is in every community served by vocational agriculture, young men who do not want to farm, others who have no place on the farm, and youth in these villages without training for specific occupations. By developing and extending our farm-shop program, and the principles of agricultural education, we could easily and efficiently meet the needs of this potential reservoir of skilled and semiskilled labor.

More Teachers of Farm Mechanics Needed

A farm-shop program may be established whereby a second teacher may be employed to teach this extensive shop work. He should be selected on the basis of his mechanical abilities and his training in farm mechanics. Otherwise he should meet the regular, vocational agriculture requirements. This teacher must have the rural point of view and have a thoro understanding of farm machinery.

The shop program should be based on the needs of the community and the farms in the patronage area. Industries in or near the community should determine the nature of the shop program. Classes should be arranged to allow village boys to receive training in this shop in communities where it is not practical to have additional courses in industrial arts or manual training.

Other classes may be organized for the out-of-school rural and farm youth which will fit them for industrial or farm employment. This is a group of young people not now given consideration in our educational program. Such classes may be the shop teacher's part-time and evening classes, comparable to the regular classes now given to farm youth and adults by teachers of vocational agriculture.

The Core of the Instructional Program

For the most part the shop program should be built around the care and repair of farm machinery, trucks, tractors, and automobiles. It should be general in order to give as much pre-employment training as possible. It should serve to uncover natural talent, then help develop this talent.

During this general training on farm equipment, training may be given in arc and gas welding and machine-shop work as it relates to the maintenance of this equipment. Again, it must be remembered that this program is not to train skilled welders or lathe operators, but to give general pre-employment training which will aid farm youth and village youth in securing jobs in industry. For the most part it should train farm youth and farm adults to take better care of their farm equipment.

During this shop program training should be given in practical building construction, concrete work, sheet metal, blacksmith, metal work, soil conservation, and any other mechanics as it pertains to the farm.

By this time the reader may feel that

this is an enormous undertaking. It is, but it is not insurmountable. It is a part of vocational agriculture heretofore generally forgotten. It must not remain so unless we want someone else to come in and do it for us. It will take a long time to develop such a program and to train teachers to do the job right, but it can be done.

Developing Shop Skills Needed in Farming Programs

E. M. PENINGTON, Instructor,
Mineral, Virginia

BEFORE a farm-shop program can be developed to a point where it holds a worthwhile place in our program, it must meet several conditions: and only when it does meet these conditions can we say that it is worth the time, money, and effort spent on it.

1. The teacher must be sold on the value of farm-shop work and consider it a definite part of his program.

2. The shop program should be so organized that boys taking the shop course will get training in those abilities involving the use of mechanics that are essential to successful farm operation.

3. The shop program should be so organized that it will be of service to the boys and all other farmers in the community.

Survey Made the Basis for Course

Each summer I take a farm-shop survey. This survey covers, on an average, 125 farms. In taking this survey I find out what machinery is used on the farm, the condition of this machinery, what repairs are necessary, and record as near as possible the approximate cost of the repair job.

At the beginning of each school year I take a survey from my all-day F.F.A. boys just as soon as they have set up their project program for the year. In this survey I list all of the articles that they will need to build or repair in the school shop during the year in connection with their farming program.

Each all-day student spends two one-hour periods in the shop each week, and many spend vacant periods in the shop as well.

First Years Important

It has been my experience that many boys get off to a poor start in the farm shop during their first two years. In most cases the shop work is a new experience and they are not very sure of just what they want to do. If a definite program of shop work is not set up for them in the beginning, many boys will never find themselves in time for the teacher to help them get something very definite out of their shop work. This first year is so important in the farm shop, that I have set up a chart which I keep posted in the shop. This chart has a long list of shop skills heading vertical columns and boys' names are listed down the left side. Squares are available for checking. Each boy is required to per-

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Studies and Investigations

C. S. ANDERSON

Farm Duties and Responsibilities of Rural Boys

E. B. KNIGHT, Teacher Education,
Knoxville, Tennessee

FEW faculty members in rural high schools know their students as intimately as do teachers of vocational agriculture. None have as splendid an opportunity to see pupils from as many points of view, or to watch them perform in their native environment. Despite these advantages, in numerous cases, teachers of agriculture do not possess certain types of information which are highly significant in the effective training of individuals for farming careers.



E. B. Knight

In recognition of the need for a better understanding of vocational students, the Department of Agricultural Education at the University of Tennessee for two years has been studying many phases of the rural youth situation. Among other rural young men the investigation has included 839 high-school boys. Approximately 95 percent of these youths were members of all-day agricultural classes when they completed questionnaires under the direction of the author. Sixteen high schools participated in the study which involved three widely separated areas of Tennessee. The institutional enrollment range was 72 to 562 pupils, with ten schools registering not more than 200 students.

Home-Farm Responsibilities

The home-farm duties that ordinarily are the personal responsibility of the rural boy offer valuable information concerning the extent of his experience in agricultural activities. They also give clues regarding his farming interests and suggest pertinent possibilities for his supervised farming program. Therefore, data like those found in Table I are worthy of consideration.

Two types of home-farm responsibilities had practically equal rank as duties of Tennessee rural boys who were members of high-school classes when interviewed. These outstanding activities were "livestock feeding and care" and "general chores." No doubt the latter frequently included the former but were not deemed of sufficient importance to warrant being named separately. Milking, reported by 208 youths, was cared for by about half as many individuals. Once again, it is probable this task often was viewed as part of farm chores. Thirty-two students seemingly were entrusted with considerable field work, perhaps even to the extent of major responsibility.

On the whole, these Tennessee rural youths had farm duties of a rather simple nature. This may be due to several fac-

Table II offers quite a contrast to the data contained in Table I. Seemingly, altho many boys were responsible for minor home-farm duties, they felt they possessed ability in major aspects of farm activities. Two-hundred ninety-six believed they were especially competent at plowing and cultivating while 170 rated themselves above average in phases of crop production. If the three types dealing with livestock be considered as an aggregate the total number of students

TABLE I. HOME FARM RESPONSIBILITIES OF CERTAIN TENNESSEE RURAL HIGH SCHOOL BOYS

Activity	Number of Boys Responsible for Activity			
	East Tenn.	Middle Tenn.	West Tenn.	State
Livestock, feeding, care.....	118	190	96	404
Chores, general.....	119	189	84	392
Milking.....	53	110	45	208
Field work.....	11	15	6	32
Miscellaneous.....	23	7	3	33

tors, viz., their age, the need for regular attendance at high school, and an ample home labor supply. There is evidence that a large portion of their practical experiences concerned livestock, and involved skills instead of managerial abilities. Such a situation calls for lessons planned to supplement those areas in which the student's training is limited.

Work Boys Can Do Best

Appearing on the questionnaire was an item requesting each individual to name the types of farm work he felt he could do best. A wide variety of answers was received; these were grouped under the six headings appearing in Table II.

reporting would be 313, somewhat more than that for "plowing, cultivating."

Interestingly enough, nearly every high-school youth reached by the study felt sufficiently competent to name at least one kind of farm work. This fact suggests that teachers in possession of like information regarding individual pupils might well capitalize on these personal abilities by relating them to new phases of subject matter. In other words, instructors may apply the familiar psychology of going from the known to the unknown thru the interest-relationship route. Give students public recognition for their agricultural skills by making them feel like class experts in certain areas, and develop, thereby, a sense of

TABLE II. TYPES OF FARM WORK RURAL HIGH SCHOOL BOYS FEEL THEY CAN DO BEST

Type of Work	Number of Times Boys Named Type of Work			
	East Tenn.	Middle Tenn.	West Tenn.	State
Plowing, cultivating.....	84	157	55	296
Crop production.....	80	51	39	170
Livestock management.....	48	74	41	163
Feeding.....	21	34	30	85
Milking.....	19	38	8	65
Mechanical.....	10	18	19	47

TABLE III. KINDS OF FARM WORK RURAL HIGH SCHOOL BOYS WOULD LIKE TO DO BETTER

Kind of Work	Number of Times Boys Named Type of Work			
	East Tenn.	Middle Tenn.	West Tenn.	State
Livestock management.....	51	107	74	232
Plowing, cultivating.....	37	110	21	168
Crop production.....	49	53	23	125
Mechanical work.....	33	32	23	88

Developing Chapter Advisers of the Future Farmers of America Organization

II. Degree of Student-Teacher Participation

HAROLD L. KUGLER, Supervising Teacher, Manhattan, Kansas

IN THE first installment appearing in the last issue the responsibilities of advisers of F.F.A. chapters were listed. The responses of 25 supervising teachers in the North Central Region were recorded, showing their rating of these responsibilities from the standpoint of their importance. In the present article the extent to which student teachers receive participating experience in these responsibilities is shown.



Harold L. Kugler

Total Student-Teacher Participation

The number of student teachers reported for each responsibility is given in Table II which indicates a range from 271 to 215. This difference is due to the fact that a few supervising teachers failed to check a given responsibility and the number of student teachers participating in the check list. The percentage of students reported under each of the headings indicates the degree of participation. The number of student teachers reported for each responsibility was used as the base for determining the percentage of the degree of participation.

The percentage of student teachers who received no participation in certain adviser responsibilities because they were not carried out, ranged from 5.90 to 93.82. There were 33 adviser responsibilities listed in which 20 percent or more of the student teachers failed to receive participation experience for the reason

that the responsibility was not carried out.

Only two responsibilities in which the student teacher was directly responsible with supervision were participated in by 20 percent or more of the student teachers. These were "counseling in chapter parliamentary procedure practice," 26.8 percent, and "stimulating boys to work toward advanced degrees in the F.F.A. organization," 31.0 percent.

There were no cases in which 20 percent or more of the student teachers were reported participating in responsibilities in which they were assisting but not directly responsible. The adviser responsibility which received the highest degree of participation under this heading was "directing chapter co-operative purchases." The percent for this responsibility was 15.12.

The percentage of student teachers observing but not participating ranged from 31.6 percent in "serving as adviser of regular F.F.A. chapter meeting," to zero in three adviser responsibilities. There were nine responsibilities in which over 20 percent of the student teachers were reported as observing the activity but not participating.

There were 20 adviser responsibilities in which 20 percent or more of the student teachers received explanations only concerning the activity. The adviser responsibility listed as having the highest percentage of participation on the part of the student teacher was "formulating chapter program of work," and the percent was 52.37.

The degree of participation where student teachers did not receive experience in any form in the adviser responsibilities ranged from 58 percent for "conducting chapter initiation of Future Farmers," to

5.5 percent for the responsibility "arranging paraphernalia for chapter meeting." There were 28 responsibilities in which 20 percent or more of the student teachers did not receive experience in any form.

Degrees of Participation Where Adviser Responsibilities Were Carried Out

The five degrees of participation, together with the students who failed to receive participation, because the activity was not carried out, constitute 100 percent of the students reported for any one responsibility. In determining the percentage of participation in the five degrees set forth in the check list, the number of student teachers reported as participating in the adviser responsibilities constituted the base.

A ranking of the five degrees of student-teacher participation on the basis of the degree having the highest percentage of student teachers reported for each adviser responsibility showed that: student teachers who did not receive experience in any form ranked first on 22 responsibilities; student teachers receiving explanations only concerning the adviser responsibility ranked first on 15 responsibilities; student teachers observing the adviser responsibility but not participating ranked first on six responsibilities; student teachers having responsibilities with supervision ranked first on four responsibilities; and student teachers assisting but not directly responsible did not rank first in any adviser responsibility.

Summary

From a study of the data submitted by the 25 supervising teachers of vocational agriculture located in the North Central Region, the following conclusions have been drawn:

1. The supervising teacher, as shown by the means computed in this study, has had 10.8 years teaching experience; 4.4 years experience as supervising teacher; 8.2 years experience as F.F.A. chapter adviser; and has been responsible for the advancement of 8.9 Future Farmers to the State Farmer degree, and 1.2 State Farmers to the American Farmer degree.

2. Teacher participation in day and night chapter meetings was provided in 11 of the 12 states reporting. The mean number of day chapter meetings held was 15.3 and the mean number of night meetings held was 9.8.

3. The number of student teachers participating per class period ranged from six to one. Where more than one teacher was supervised at one time, there was a tendency for teacher participation to become less functional.

4. There is much variability within the 12 states of the North Central Region in the plans for offering student-teacher participation in the field of vocational agriculture. The total number of hours of student-teacher participation ranged from 300 hours to 25 hours.

5. In most of the states in the North Central Region, student teachers have an opportunity to participate in F.F.A. activities on a full-time basis. This was possible due to the fact that in 19 of the 25 participation centers, student teachers established temporary residence in the town where the participation center was located. Five of the centers were in the cities where the university or college was

significance that will motivate their progress in vocational agriculture.

Work Which Students Want to Do Better

Not only were the respondents urged to tell of their proficiencies in farming, for another question asked them to indicate the kinds of farm work they would like to do better. Altho fewer youths responded to this item, the data compiled are worthy of thoughtful consideration.

Improvement in operations associated with livestock management was desired by 232 high-school students, a large majority of whom were enrolled in all-day classes in vocational agriculture. Better ability in plowing and cultivating was the ambition of 168 boys; these pupils frequently stated such goals were closely connected with the use of power machinery. One-hundred twenty-five youths wanted to acquire greater skill in crop production, and 88 others aspired to mechanical proficiency.

Once in possession of similar clues alert instructors have a short-cut to meeting the needs of their students. By means of this type of highly individualized data it should be possible to arouse lasting

interest by conclusively demonstrating how various class procedures facilitate the youth's progress towards his occupational goal.

Outcomes of the Study

1. The home-farm responsibilities of the student give valuable information as to his farm experience and interests.

2. The farm duties of rural, high-school boys are relatively simple in type and involve skills rather than managerial abilities.

3. Class lessons in vocational agriculture should provide training in those areas in which the student's home experience is limited.

4. Most youths feel they are especially competent in at least one phase of farming.

5. Farm activities in which a student possesses considerable ability can well be utilized to promote better understanding of new subject matter.

6. The student's declared desire for greater proficiency in a definite farming activity should be employed to motivate related aspects of his vocational training in agriculture.

located. Only one participating center reported student teachers commuting.

6. There was active participation in each of the 49 responsibilities reported

upon. Forty-eight responsibilities were reported carried out by 10 or more supervising teachers.

7. Each responsibility reported was considered to be of importance by the chapter advisers carrying out the responsibility. Of the 42 adviser responsibilities treated statistically, 69 were ranked above 2.5, the midpoint of evaluation, and 21 below. No responsibility received a lower arithmetical rating than 3.2.

8. A large percentage of student teachers reported in the North Central Region failed to receive participation in many chapter adviser responsibilities.

9. The length of participation period in clock hours and the number of students under observation at one time definitely affected the degree to which actual participation was provided student teachers in adviser responsibilities.

10. The frequency of occurrence of chapter adviser responsibilities had little effect upon the evaluation by the supervising teachers of the importance of the adviser's responsibility; however, the frequency influenced the degree of student-teacher participation.

11. The evaluation of the importance of responsibilities has comparatively little effect upon the degree of actual participation provided student teachers.

12. There is a variation in the importance attached to the F.F.A. organization within the 12 states in the North Central Region. This is shown by the fact that in certain states a number of the 49 adviser responsibilities were not carried out.

Comment of Supervising Teachers

A study of the reasons given by the supervising teachers for the lack of participation on the part of the participating students in adviser responsibilities reveals the fact that seasonality of certain responsibilities, length of participation period, and ability of student teachers are the most significant. The following suggestions were offered by the supervising teachers in the North Central Region pertaining to improvement of the participation program. The suggestions offered for the improvement of the program in the student-participation center are as follows:

1. Have a progress chart which should include the most important points of the F.F.A. program to be given attention by the student teacher.

2. Require a portion of the time spent by the student teacher to include education concerning the F.F.A.

3. Use such a suggested outline of experiences as has been prepared in this study and choose from this list, with the assistance of the student teacher, the experiences most needed, and limit the number to be performed.

4. Encourage student teachers to participate in collegiate F.F.A. chapters with the view in mind of becoming an F.F.A. adviser.

5. Spend more time in the participation center.

6. Delegate detailed responsibilities to each student teacher in regard to the F.F.A. activities and provide a practical F.F.A. chapter program of work for student-teacher participation.

The suggestions offered for the improvement of the teacher-participation programs as provided in the college or university are as follows:

Table 2. Degree of Student-Teacher Participation in Chapter Adviser Responsibilities

Responsibilities	Number student teachers reported	No participation as activity not offered	Responsibility with supervision	Assisting but not directly responsible	Observing but not participating	Receiving explanations only concerning the activity	No experience in any form
		%	%	%	%	%	%
1. Arranging with school authorities for F.F.A. meeting, or other special F.F.A. activities.....	271	22.6	18.9	11.5	17.4	15.1	14.5
2. Arranging paraphernalia for chapter meeting.....	271	30.3	16.2	12.9	23.6	11.5	5.5
3. Counseling with chapter president in preparation for chapter meeting.....	271	18.8	19.9	12.5	23.3	9.2	16.2
4. Serving as adviser of regular F.F.A. chapter meeting.....	269	19.0	17.1	2.2	31.6	11.1	19.0
5. Serving as adviser of an F.F.A. officers' meeting.....	251	25.5	18.3	3.2	18.7	6.0	28.3
6. Counseling with chapter secretary in correcting and recording minutes of chapter meeting.....	271	23.3	16.6	3.7	22.5	11.4	22.5
7. Counseling with chapter treasurer in preparing treasurer's report.....	271	18.8	13.6	6.3	26.2	10.7	24.4
8. Counseling with chapter reporter in writing news items.....	269	19.0	18.6	13.4	18.6	5.5	24.9
9. Counseling with program chairman in preparing program for chapter meeting.....	271	18.8	19.6	11.1	18.8	16.2	15.5
10. Counseling with recreation chairman in preparing recreation for chapter meeting.....	271	5.9	18.1	12.9	29.2	25.1	8.8
11. Counseling with chairman of refreshment committee regarding preparation of refreshments for chapter meeting.....	271	42.1	11.4	8.5	10.3	17.4	10.3
12. Preparing and delivering talk as part of program of chapter meeting.....	271	36.5	19.6	2.6	7.4	8.1	25.8
13. Assisting committee in preparing progress reports.....	271	25.8	11.8	11.4	10.4	9.6	31.0
14. Assisting committee in preparing final report of its activities.....	271	23.3	11.8	4.4	7.0	17.3	36.2
15. Conducting chapter initiation of Green Hands.....	261	6.1	10.0	3.8	5.4	22.2	52.5
16. Conducting chapter initiation of Future Farmers.....	269	6.0	8.5	4.1	6.3	17.1	58.0
17. Conducting installation of F.F.A. officers.....	269	25.6	5.6	0.0	2.2	13.4	53.2
18. Organizing and maintaining F.F.A. chapter library.....	271	20.7	10.3	4.4	12.6	25.1	26.9
19. Maintaining filing system for F.F.A. materials.....	259	7.7	19.7	12.8	21.2	18.5	20.1
20. Formulating a chapter program of work for the year.....	252	7.5	6.8	8.3	9.9	52.4	15.1
21. Setting up a calendar of F.F.A. activities for the year.....	257	21.8	8.2	5.4	8.6	39.3	16.7
22. Preparing final chapter activity report.....	254	20.1	3.6	4.7	9.4	34.2	28.0
23. Directing F.F.A. activities for earning funds for the chapter treasury.....	259	24.3	10.8	11.6	13.1	34.4	5.8
24. Assisting in building chapter budget.....	257	23.0	3.4	7.0	7.8	30.0	28.8
25. Directing scholarship improvement among chapter members.....	257	24.5	19.4	7.8	8.6	26.8	12.8
26. Counseling chapter in selection of officers.....	257	24.5	1.2	1.6	0.0	37.7	35.0
27. Instructing F.F.A. officers in ritualistic performance.....	257	8.2	15.2	6.2	15.6	20.2	34.6
28. Conducting parent-son banquet.....	247	52.6	5.3	4.8	1.2	21.9	14.2
29. Conducting father-son banquet.....	257	68.5	8.2	5.1	5.4	7.0	5.8
30. Conducting mother-son reception.....	259	93.8	0.0	0.0	.8	3.9	1.5
31. Conducting a meeting of parents of chapter members.....	241	46.9	6.6	4.2	7.9	12.0	22.4
32. Conducting special chapter meetings, such as entertaining visiting F.F.A. groups, pre-vocational students, Boy Scouts, etc.....	224	22.3	14.7	8.5	7.6	20.5	26.4
33. Preparing F.F.A. program for community meeting or civic club such as Kiwanis, Rotary, etc.....	255	48.6	4.7	3.1	6.7	9.4	27.5
34. Preparing F.F.A. programs for community farm organizations such as Grange, Farmers' Union, Farm Bureau, etc.....	256	60.9	6.3	7.0	1.6	12.1	12.1
35. Conducting an F.F.A. Summer camp.....	247	68.4	0.0	0.0	0.0	22.7	8.9
36. Conducting an F.F.A. overnight hike.....	247	77.3	0.0	0.0	0.0	8.9	13.8
37. Directing chapter co-operative marketing activities such as marketing wool, livestock, potatoes, etc.....	259	27.4	16.2	8.5	7.3	33.6	7.0
38. Directing chapter co-operative purchase of seed, fertilizer, equipment, etc.....	271	10.3	14.4	15.1	16.6	17.0	26.6
39. Preparing F.F.A. assembly program.....	271	53.5	4.4	3.0	1.1	17.0	21.0
40. Conducting chapter public speaking contest.....	269	31.2	3.7	4.5	20.1	13.4	27.1
41. Conducting F.F.A. project tours.....	268	15.7	6.0	2.6	21.3	23.4	31.0
42. Preparing an F.F.A. chapter exhibit.....	269	20.8	7.1	4.5	11.9	25.6	30.1
43. Assisting chapter members in preparing individual exhibits.....	271	43.2	3.3	3.3	2.2	10.0	38.0
44. Planning F.F.A. chapter fair exhibits.....	271	42.8	3.0	.7	1.5	15.5	36.5
45. Counseling in chapter practice of parliamentary procedure.....	216	19.4	26.9	9.3	19.4	18.5	6.5
46. Stimulating boys to work toward advanced degrees in F.F.A. organization.....	245	6.5	31.0	2.9	17.6	32.2	9.8
47. Preparing reports of records necessary for advanced degree awards.....	237	11.0	16.9	6.7	19.4	38.4	7.6
48. Directing class lesson study on the F.F.A. organization.....	215	33.5	6.1	.9	6.5	30.7	22.3
49. Obtaining active membership in F.F.A. chapter.....	224	31.3	3.1	3.1	8.9	17.0	36.6

1. A collegiate F.F.A. chapter should be in existence in all colleges and universities responsible for the preparation of teachers of vocational agriculture.

2. Opportunity should be provided for student teachers to visit more F.F.A. meetings, attend F.F.A. conventions, and sit in on state F.F.A. officers' and committee meetings.

3. Local F.F.A. chapters should be brought before the college class for purpose of discussing the chapter program of work.

4. Set up a model F.F.A. unit as a classroom-teaching device to enable student teachers to obtain F.F.A. adviser experience by assigning student-teachers' problems and duties with other members of the class participating as students and the directing teacher acting as the local adviser.

5. Provide class study of F.F.A. in which studies are made of actual F.F.A. programs of work, records of accomplishments, and chapter activities.

6. Provide for selection of student teachers with natural abilities to become F.F.A. advisers.

7. Closer co-operation on the part of the directing teacher of the college or university and the supervising teacher of

the participation center should result in the establishment of special courses in the responsibilities of F.F.A. program building for student teachers.

The following are comments offered by the supervising teachers of the North Central Region pertaining to problems encountered under the present plans of developing chapter advisers of the F.F.A.:

1. There is a lack of time on the part of the participating student and supervising teacher to develop this phase of work.

2. Student teachers are slow in assuming responsibility. They often just get started by the end of the period of supervised teaching.

3. In six weeks, the student teachers acquire only a picture of one part of the F.F.A. chapter program of work.

4. Student teachers are not in the participation center long enough to know the boys, are not familiar with the local program of work, and do not understand the objectives of the local F.F.A. chapter.

5. Student teachers are loaded down with teaching assignments.

6. It is difficult to acquaint the student teachers with seasonal F.F.A. activities.

from becoming academic in nature.

2. Continuing to employ a high proportion of the OSY teachers from the ranks of tradesmen.

3. Keeping the courses organized as general preemployment instruction within the realm of types of equipment and personnel available.

4. Encouraging the states to exercise initiative in the development and enrichment of the instruction within the rules and regulations.

5. Securing earmarked funds from Congress and keeping them earmarked for expenditure in the rural community where the training programs are organized.

6. Securing real, challenging "work projects" at reasonable cost upon which honest work experience provides the basis for the educational outcomes sought.

7. Developing administrative routines facilitating the financing, supervising, and auditing aspects of the program both in Washington and in the states.

*Presented before the annual meeting of the State Directors of Vocational Education in session at Boston, Massachusetts, December 9, 1941, in connection with the annual meeting of the American Vocational Association.

OSY Courses

(Continued from page 169)

since October 1. The low enrollment in OSY courses during July, August and September was due to the fact that:

1. Most of the states planned their program under Public Law 812, so that practically all of the funds available thru this act would be expended by June 30.

2. The uncertainty of additional funds for a continuance of the program after June 30 made it difficult to take the definite steps necessary in time to have a program in operation thru July and August. By the time the funds were available and in the hands of the states, it seemed advisable in most instances to postpone any great development of courses until after the close of the harvest season.

The Fourth "P" Is in Prospect

Quite regularly these days we are being asked the question, "What are the prospects?" It appears that the more obvious surpluses of dammed-up farm and rural youth have disappeared, particularly in the more highly industrialized states and regions. The first OSY classes were set up in those centers where surplus rural youth were most certain to be found in large numbers.

Late in October in a community in California not too far removed from the aircraft factories, a local superintendent assured one of the state supervisors that there were no rural youth available for OSY instruction. The local teacher of agriculture, however, made a survey and, much to the amazement of the superintendent, listed the names of 78 out-of-school young men still in that community eligible for enrollment in the OSY classes.

In the Southern states, where at present over half of our OSY courses are located, there appears to be uncounted numbers of out-of-school, unemployed, rural young men for whom the OSY program may be of great service.

Furthermore, a great nationwide campaign is being launched for increasing

the production of certain farm commodities found essential for the welfare of the nation. Punch has been added to this campaign for increased food production by the promise of the secretary of agriculture to guarantee certain minimum prices for those special commodities desired.

The drive for "Food for Freedom" has raised some concern among agriculture people over the availability of farm machinery in quantities sufficient to guarantee the attainment of the goals set up. As a consequence, great pressure is being exerted to get old farm machinery, trucks, and tractors repaired for the coming season. This movement should create a tremendous supply of "work projects" for OSY classes, and make for a quality of instruction that is difficult to attain when real "work projects" are not available. In addition, from Public Laws 812 and 146, local communities will have expended approximately six million dollars on equipment which will likewise increase the effectiveness of the instruction offered.

The first year's experience in dealing with the OSY program certainly will become an asset, particularly the experience had by and with the tradesmen teachers who have been employed. At the moment it appears that from one-half to one-third more classes will be organized this year than were conducted last year.

The Fifth "P" Is a Problem

This brings us to the point where we should have been long ago. The problems we face can make the administration and conduct of the OSY program interesting and challenging, if nothing else. Some of these problems are crucial in importance. Some are plainly aggravating and annoying, and perhaps there are others that are of no consequence at all. Without making any further effort toward classification, here are listed the areas of some of our most pressing perplexities of the moment.

1. Keeping the OSY (4) instruction

Adult Farmers

(Continued from page 167)

first year. One member started complete farm accounts in co-operation with the state college of agriculture and completed these records a year later. One member bought a purebred Poland China bred gilt at the state fair, in an effort to improve the breeding of his hogs.

The work of the second year included a study of "Farm Practices That Pay," and was no doubt instrumental in developing various improved practices on the farms of several members. Six different farmers purchased from one to three bushels each of improved strains of hybrid seed corn in an effort to improve corn yields. Five farmers co-operated with the local and state extension service by applying nitrate fertilizer as a top dressing on wheat in early spring, and thus tried another farm practice that had not been used on any of these farms in the past. One farmer filled three picket silos, and is feeding silage to his breeding beef cows for the first time. All projects started during the first year were continued, in addition to the new projects started during the second year. Several new members also took part in the work during the second year which indicates that the work is evidently gaining momentum.

Factors Contributing to Success

1. Getting well acquainted with each member by visiting in the home.

2. Studying carefully the farm map, the livestock and management program of each member.

3. Putting suggestions in the form of questions and working out plans with the farmer so he thinks the work is as much his idea as instructor's.

4. Never letting an opportunity go by to talk to a member and assure him of interest in his work and confidence in him.

5. Doing all that is possible to improve the accuracy of records and analyze results.

6. Planning much of the project work at night in the homes of the members.

Future Farmers of America

L. R. HUMPHERYS

Practical Procedures in Conducting an F.F.A. Livestock Show and Auction

MARVIN L. MYERS, Teacher, Crowell, Texas

ARE you planning to have a Community and F.F.A. Project Show? If you are there are certain points that should be taken into consideration before attempting to sponsor it. There must first be interest among the boys. To create this interest and enthusiasm one should start talking and planning with them long before the show. If the boy plans and prepares for several months to exhibit something in the show, he is not likely to change his mind when the time comes. One should remind the boys of the show when they are setting up their project program. The idea of competing with some one else seems to cause them to do a better job with the projects which they have selected.

Get the Public to Look Forward to It

Publicity is needed if the F.F.A. show is to be a success in the eyes of the public. This publicity should start in an indirect form when the boys get their project program set up. The chapter reporter can get good material for a news article or articles on the projects that have been selected or projects that are being carried out by the members. Somewhere in these articles he can mention the projects that are being carried out to enter the "local project show next spring."

A good news article should mention the name of as many people as possible, as this helps to increase the interest of the boys and makes more of them want to get in the "limelight." The reporter may continue this indirect publicity until shortly before show time by writing articles on progress being made with projects of individual boys. If the public is to be allowed to participate in the show, news articles to this effect should be in the paper several months before show time.

The week before the show occurs one should have a considerable amount in the local paper giving information such as the names of the judges, the premium lists, the names of the boys participating, things to be shown, etc. If it is planned to conduct a sale in connection with the show, full details of this should be given.

Let the Boys Do It

A considerable amount of rules and regulations are necessary for a show of this type. It is best to leave this as much as possible in the hands of the boys. This makes a very good problem for chapter meetings. Some of the things the boys need to decide on are: date of show, place, exhibits, ribbons, and judges.

After the premium money has been secured and each boy has turned in his entries, the premium list should be worked out. The teacher must be very

careful at this point, or some of the boys may try to swing more money than could be justified to the particular classes they plan to enter.

Financing is a problem that requires a great deal of effort to solve in many communities. In some places the chamber of commerce, Lions Club, or other organization will furnish the money. Some communities do not have these organizations. In some situations it is up to the boys and the teacher to raise the money from individuals in the town and community. If this method is used, one should make a list of the names of the organizations or individuals that he plans to ask for donations, and when a man is contacted, his name should be checked so he will not be asked the second time. For two years in Crowell the boys took this list of names and made the contacts. Each year they netted about \$110, which was used for expenses and premium money. Last year two businessmen volunteered to make the contacts for us. They collected \$225 for the show.

Selection of Auctioneer Important

Should there be three or four thousand dollars' worth of calves to be sold, it is important to give considerable attention to the selection of an auctioneer. A good auctioneer is a good judge of livestock and also a good psychologist.

Two years ago we used a local man for an auctioneer, and he did not charge us anything. He was the best in the community but still he was not an auctioneer. Those calves averaged \$9.64 per hundred. The past year we used the best auctioneer we could get and he cost us \$25. These calves averaged about \$12.50 per hundred. This means that the calves averaged about \$22 per head more than the previous year. On the market, considering the difference in the price of calves for the two years, they were actually worth approximately \$11.50 per head more. This means that the auctioneer and a few additional outside buyers netted the boys about \$10 per calf.

Preparations for the Auction

Before the auction starts there are certain announcements and precautions that should be made to prevent trouble later. First, decide on the order in which the calves will be sold and get the boys lined up with their calves so no time will be lost. If too much time is lost between calves the bidding may slow up.

Second, select a good bookkeeper to record the name of each buyer, his bid, and the calf he buys. Often the boys and the buyers disagree on the price bid when they pay for the calf. The bookkeeper's record will settle these mistakes.

Third, announce to the buyers the method and place the calves will be weighed, and instruct them where to settle with the boys for the calves purchased.

Some buyers expect a three percent shrink on the calves. Announce to them if you do or do not plan to take this shrink. Some shows have the calves weighed in the morning and sell them on that weight. This is not a good practice because the boy cannot use that practice later on in life and he also fails to realize the shrink livestock may take in showing, shipping, etc. If the calves have been on exhibit all day, the buyer should not expect an additional three percent shrink, however, they should be told this before the sale starts. This seems needless yet we have had buyers try to get us to give them a three percent shrink after the sale was over and the announcement had previously been made.

Fourth, announce to the buyers where they may find lots in which to put the calves, should they not have facilities for taking the calf with them. They should be told that the boys will take the calf to the scales and also to the lot if they so desire it.

Preparation of Show Grounds

A certain amount of preparation or work on the place where the show is to be held is necessary. The extent of this will depend upon the type of place and facilities available. Pens or strong tying places or both for livestock, chicken coops, and exhibit stands will be needed, depending upon what is in the show. Plenty of straw should be available for bedding the stock. It is important that these be arranged so the people can see the exhibits without becoming too crowded. Most small towns do not have a building for such occasions. Under these conditions it may be possible to secure the co-operation of some garage or similar building that is large enough to house the show. A good show staged in a garage furnishes excellent advertisement for that place of business.

Selling the livestock at the end of the show presents one of the greatest problems of the entire affair, in most localities. In my community the boys have always wanted an auction sale. Since the town is rather small and no merchant can afford to pay a big price for a calf, we depend on cattle buyers all together to buy the calves. This means that personal letters must be sent to each buyer in that section, as well as to commission houses, cottonseed-oil mills, meat-packing plants, etc. Probably the most effective method we use in bringing in outside buyers is by getting the local cattle buyers to contact their cattle buyer friends, and by announcing the sale at other sales in the surrounding counties. Since some of the ranchmen in that county are good customers of various commission companies, they can usually bring a buyer or two from Ft. Worth.

If the boys have had interest in the show; if good publicity has been had; if capable judges are selected; good

premiums are given; if the best auctioneer is obtained; and if a suitable place for the sale is found the show will be a success, for the boys are satisfied. If the boys are satisfied the community should be satisfied.

Builds Its Program on Co-operation

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FOR three years the Salmon chapter of Future Farmers of America has built the major part of its activities on the principle that real co-operation is the key to success in agriculture. The element of co-operation has extended to a large variety of agricultural activities in production, buying, and marketing. Last year our chapter organized co-operatives in poultry, potatoes, swine, beef, supplementary feed buying, pest eradication, and candy selling.

In poultry, our boys co-operatively purchased approximately 3,000 chicks and pullets from the best breeding stock that was available. In swine, we purchased from the best hogs in the west. These breeding gilts went to boys who had purebred animals for the first time on their farms. In this connection, a feeding contest for swine was organized, and the winner was awarded a purebred gilt by the American National Bank at Idaho Falls. Our feed co-operative handled molasses on a large scale as the beginning of a program in providing protein supplements for the community, used by some farmers for the first time.

Possibly our two largest co-operatives were the seed-potato co-operative and the feed-calf co-operative. Much of our land has high elevation and is well suited to growing seed potatoes. Our co-operative planted 29 acres of seed potatoes, mostly on one- and two-acre plots. Two acres were grown by the chapter, with a committee of three boys in charge of the project. Each chapter member was assessed six hours of labor. It was his responsibility to work out his assessment. The yields were high for such an altitude and, according to the state seed inspector, the crop was the most nearly free from disease of any potato crop in the state.

Beef is the major enterprise in agriculture in the Salmon country. Our chapter members, therefore, organized a feed-calf co-operative in connection with the county cattle growers' association. A committee of three boys who understand beef feeding secured the applications of those who desired to feed calves. These applications were all gone over very carefully with the association and with the instructor. On the basis of this review, a written contract was set up which was signed by the cattleman, the Future Farmer making the purchase, and the adviser. The main items in the contract called for careful feeding on the part of the Future Farmer, with a provision that the boy would retain 69 percent of the sale price of the calf and would reimburse the cattleman for the remainder of the sale.

This contract seemed to be very satisfactory and only emphasizes what can be done on a major scale in a co-operative way.

Go Thou and Do Likewise

Arkansas—The Bismarck chapter purchased two \$50 Defense Bonds—one from money earned at community and county fairs; the other, from feeding and marketing hogs.

California—Members of the Reedly Chapter recently went into action on the "double quick" to save food for defense. Due to a shortage of agricultural labor resulting from military and defense activities, a large field of lettuce needed hoeing quite badly. The chapter members "pitched in" and saved the crop.

Colorado—Scrap metal, now rusting into uselessness on thousands of Colorado farms, will be the means whereby members of the Future Farmers of America help their country, their State association, and themselves. Under the leadership of their state president, Loudon Buster of Longmont, 60 F.F.A. chapters in Colorado will constitute one of the agencies to help recover second-class scrap.

Iowa—Twenty-six members of the Duroc Breeders Association, a subsidiary of the Senic City, Iowa, Chapter of Future Farmers, recently completed one of three co-operative feed mixes. These boys purchased, thru the local farmers' co-operative elevator, feeds to mix 33,488 pounds of protein and mineral supplement for 130 purebred Duroc sows and litters. The total value of the feeds purchased and mixed was \$894.

Kentucky—Four hundred and fifty Kentucky Future Farmers in 52 F.F.A. chapters, located in 40 counties, have purchased co-operatively 20 carloads, or approximately 1,200 head of choice quality Hereford heifer calves to be used in starting breeding programs or to expand their programs already under way. These 20 loads of calves amounted to a total of approximately \$52,000.

Maine—The Old Town Chapter reports selling their third and largest load of paper, having a gross weight of 1,950 pounds. This group is now collecting papers and magazines for a fourth load.

Montana—The Montana Association has taken out a \$25 membership in the National Safety Council. Sixty-four chapters will broadcast safety programs this year. The theme is "Highway and Traffic Safety." The motto is "Keep to the Right and Be Right."

North Dakota—Three State officers of the North Dakota Association visited 21 local chapters between December 10-20.

Oklahoma—Thirty-eight members of the Caddo Chapter have purchased a \$50 National Defense Savings Bond with money saved thru doing odd jobs in the community. Four barrows are now on feed at the high-school building where scraps from lunch boxes and other feed will soon have them ready for market. The net proceeds will be invested in more bonds.

Tennessee—The Dayton Chapter planted eight acres of land to crimson clover and turnips as a part of the Food-for-Defense program. This chapter is also co-operating in the Home-Food-Supply program by encouraging its members to produce 75 percent or more of the food the family needs.

Virginia—The Virginia Association of Future Farmers has purchased a \$1,000 Government Bond with funds from the association treasury as an example of

the state organization in a movement by which chapters thruout the state will take part in the program for the sale of bonds and stamps in the public school system.

In a letter to the association's chapters, David Walker, state president, has urged that each chapter follow the lead of the state organization and co-operate to the fullest extent with the work of the defense-savings committee of the Virginia Educational Association, which will promote the sale of stamps and bonds in the Virginia schools.

The Chase City Chapter of the Virginia Association has 22 former members in one army company. Two lieutenants, five sergeants, three corporals, and twelve privates in Company E, 116th Infantry, 29th Division, are ex-members of the chapter.

West Virginia—The Mason Chapter members have all agreed to contribute one cent per member at each F.F.A. meeting during the year. The money is to be used in buying Defense-Savings stamps and bonds for the chapter.

The Charleston Federation, composed of 12 chapters, has just authorized the purchase of a \$50 Defense Savings Bond to be paid from the federation treasury.

Wisconsin—The Neillsville Chapter, in co-operation with the local Kiwanis Club, is in its third year in the purebred dairy sire business. Sires are selected by John Perkins, instructor in agriculture, and purchased by members of the Kiwanis Club, each Kiwanian sponsoring a member of the F.F.A. chapter. The calves are raised by the boys for use in their home herds or other herds of the county or state. All increase in value, of course, goes to the boys. Calves are bought for not to exceed \$60.

Wyoming—In one section of the state a machinery pool has been started in which all old machinery is collected. Future Farmers in Wyoming will do a great deal of the repair work and at the same time, it is reported, will expand their farming programs, especially in the enterprises in which increased production is so essential.

What Do Members Know of the F.F.A.?

A GREAT source of disappointment and anxiety to me has been the fact that most of us know relatively little about the organization of which we are a part. If the F.F.A. is to make continued growth and develop in future years, then it must have a constant, steady supply of strong, worthy, and aggressive leadership from within. Leadership coming from individuals with creative minds and honest judgment. These few months of experience as your National President have brought me to the realization that for this type of leadership to be always available, we must first be thoroughly acquainted with our organization. We must know its history, its working principles, its goals, its achievements, its possibilities, and last, but not least, we must have a deep respect for an earnest desire to serve the F.F.A.—Harold Pritchard, past National F.F.A. President, in his report to 14th National Convention.

Future Farmers Co-operate in Pennsylvania

GALEN R. OELLIG, Adviser,
Davidsville, Pennsylvania

THE F.F.A. chapters of Somerset County, Pennsylvania, have participated in growing trial plots of various seedling potatoes, produced by the Pennsylvania Co-operative Potato Growers' Association, under the supervision of Dr. E. L. Nixon, in an effort to determine whether any will fulfill all the requirements of consumer and grower.

Of the original 160 seedlings planted in Somerset County, all but 26 have been discarded. The 26 varieties were grown this year to give further assurance that they will meet expectations. The local Future Farmers are very much interested in the results of this experimental potato breeding work.

The greater part of the potato breeding work is done on a Potter County farm, acquired and equipped by the Pennsylvania Co-operative Association of Potato Growers, who operate it without federal or state aid. Here Future Farmers, Future Food Merchants, and other interested groups tarry from time to time, assisting in various ways.

Those who are invited to be at Camp Potato for "Potato Field Day" (the Gala Day of the year) and the few days before and after, are especially fortunate. The Future Food Merchants of Philadelphia and the Future Farmers of Somerset County, Pennsylvania, were the ones selected this year and both groups were very much elated with the activities and the programs.

A fitting climax to the program of this year's Field Day was a pageant in which both the Future Farmers, Future Food Merchants, and local folks participated. Based on historical facts, this pageant depicted the life story of the potato from its discovery in South America by the Spanish, its subsequent adoption for use in most European countries, to its return to New Hampshire; thence, to Potter County, Pennsylvania, and all America. A parade of modern potato-growing machinery closed the pageant.

The camp will continue to be operated as a place where interested youth may enjoy a Northern Pennsylvania mountain visit where a blanket is needed almost every night during the summer and where at the same time the members may participate in the potato propagation work. The Future Farmers are assuming their share of the responsibility in developing good potato seed.

Book Review

Beef Cattle Production in the South, by D. W. Williams, 442 pp., illustrated. Published by The Interstate, list price \$2.00. Material included in the text deals specifically with the jobs and problems that are peculiar to beef cattle production in the South. Factual material has been so analyzed and treated that it will give individual farmers and Future Farmers a basis for developing sound programs and practices on their individual farms or ranches—regardless of the section of the South in which they are located—A.P.D.

Farmers' Co-operatives

(Continued from page 164)

There is a commercial creamery company about 50 miles away that will buy cream at regular market price less transportation. The creamery will furnish necessary cream station equipment. There is railroad transportation directly to creamery company. There is an apparent surplus of milk products on 50 percent of the farms. There are few separators in the community. Fifty-five percent of those farmers who have surplus milk will sell their products.

In working out a plan for dealing with a situation such as that just described several jobs would need to be listed, and ways and means worked out for doing each. These might include:

- Determining need on the individual farm
- Studying method of securing cream from each farm
- Securing equipment and space
- Setting up a co-operative receiving station
- Testing the cream
- Shipping the cream
- Disbursing producers

Next Steps in Carrying Out the Plan

4. Present data to creamery company officials to see if they are willing to co-operate in buying products, furnish testing equipment, cream cans, providing school will furnish testing room space, etc.

5. Arrive at working agreements covering details between producers, school, and creamery company as to:

- Sour or sweet cream
- Days for receiving cream
- Equipment to be furnished by each party
- Testing cream
- Providing additional supplies
- Transporting cream from station to creamery company
- Receiving station commission
- Plan for disbursing producers
- Plan for educational follow-up
- Have all working agreements approved by school officials.

7. Prepare testing room to meet requirements and consult with county sanitary engineer so as to comply with all necessary sanitary rules and regulations, if any.

8. Plan testing room for efficient operation, and with aid of creamery set up equipment.

9. Complete organization for receiving cream on certain date and advertise opening hour.

10. Arrange to have creamery company operator present, and train students or others to operate station.

11. Arrange for delivery of cream to creamery after each testing.

12. Prepare a plan for keeping satisfactory records and have them approved by school officials. Plan to have books audited at regular intervals.

13. Plan a procedure for disbursement to producers.

14. Provide for educational meetings with producers in special meetings and on individual farms for teaching farmers how to increase production and how to improve the quality of cream before reaching the cream station.

15. Set up board of directors from producers.

As has already been stated, this should be started on a small scale. But in most sections of the country co-operative effort, to be successful, must start that way. Some of the principles of co-operative marketing to be kept in mind are large volume of business, adequate capital, efficient management, and a very large part of the capital furnished by the members. The very fact that large amounts of capital must be furnished by the members to start large co-operatives handling large volumes of produce, immediately defeats such effort in many communities before the movement ever gets started. But I know of some co-operatives that have started on a small scale and are now large enterprises and are successful. These enterprises could not have been started otherwise.

Developing Shop Skills

(Continued from page 171)

form each skill on this chart to a degree of perfection that one would want to find if the work was being done on some piece of farm equipment.

I find that if a grade is given instead of a check for each skill, interest is stimulated and that the boys will try much harder to perform each skill to the best of their ability.

Our school is in the center of the county and serves an area of 516 square miles. The majority of the 80 students enrolled in agriculture live in the two extreme ends of the county. Since all of them come to school by bus we were for a time confronted with the problem of getting farm repair jobs to the shop. At first I followed the advice of several other teachers who said that if the job was worth while the farmers would see that the repair jobs got to the shop. This may work for some, but for me, it did not.

Trailer Built to Bring in Jobs

I solved the problem by building a two-wheel trailer out of F.F.A. funds. This trailer is the property of the F.F.A. chapter and is maintained by it. From my farm-shop survey of articles to be repaired in the shop, I set up a schedule so that I can pick up as many articles as possible when I am visiting the boys. As far as I am concerned it has solved my farm-shop problem. I do not have any trouble with boys not having anything to do in the shop, and the school shop is not a place where boys spend their time constructing "what-nots" and gadgets of the type often found in a hobby shop.

This year we have built two farm wagons, complete with the exception of the iron wheels; we are working now on two wagon boxes; seven wheel barrows are being built; two cultivators are being rebuilt; one corn planter is being rebuilt; and we have one grain binder to repair and put in condition. Two mowing machines are to be repaired, four spike-tooth harrows are to be repaired and the teeth drawn out and tempered; two wagons are to be rebuilt; two wagon boxes will be built, one disk harrow is ready to be repaired, and one spring-tooth harrow is available for repair.

We feel that now, in the time of national emergency, the best defense job that I can do is to teach my boys the proper handling, repair, and care of their farm machinery.

